

AMENDMENTS TO THE CLAIMS

1-97 (canceled)

98. (Currently Amended) A signal transmission and receiving apparatus for transmitting and receiving a PSK modulated signal or a QAM modulated signal, the apparatus comprising a transmission apparatus and a receiving apparatus,

said transmission apparatus comprising:

- a modulator operable to modulate a data stream to an n-level PSK modulated signal or an n-level QAM modulated signal, wherein n is an integer,

wherein the modulator is operable to select a value of n from a plurality of values of n ~~according to a transmission condition~~; and

- a transmitter operable to transmit the n-level PSK modulated signal or the n-level QAM modulated signal;

wherein the transmission power of the n-level PSK modulated signal or the n-level QAM modulated signal is determined according to information representing the selected value of n;

said receiving apparatus comprising:

- a demodulator operable to demodulate the n-level PSK modulated signal or the n-level QAM modulated signal to a demodulated data stream.

99. (Canceled).

100. (Currently Amended) A signal transmission apparatus for transmitting a PSK modulated signal or a QAM modulated signal, the apparatus comprising:

- a modulator operable to modulate a data stream to an n-level PSK modulated signal or an n-level QAM modulated signal, wherein n is an integer,

wherein the modulator is ~~is~~ operable to select a value of n from a plurality of values of n ~~according to a transmission condition~~; and

- a transmitter operable to transmit the n-level PSK modulated signal or the n-level QAM modulated signal;

wherein the transmission power of the n-level PSK modulated signal or the n-level QAM modulated signal is determined according to information representing the selected value of n.

101. (Canceled).

102. (Currently Amended) A signal receiving apparatus comprising:

- a receiver operable to receive a transmitted n-level PSK modulated signal or a transmitted n-level QAM modulated signal, wherein n is an integer,

wherein the value of n is selected from a plurality of values of n ~~according to a transmission condition~~, and the transmission power of the transmitted n-level PSK modulated signal or the transmitted n-level QAM modulated signal is relative to information representing the selected value of n; and

- a demodulator operable to demodulate the n-level PSK modulated signal or the n-level QAM modulated signal to a data stream.

103. (Canceled).

104. (Currently Amended) A signal transmission and receiving method for transmitting and receiving a PSK modulated signal or a QAM modulated signal, the method comprising a transmission method and a receiving method,

said transmission method comprising:

- modulating a data stream to an n-level PSK modulated signal or an n-level QAM modulated signal, wherein n is an integer,

wherein the modulating includes selecting a value of n from a plurality of values of n ~~according to a transmission condition~~; and

- transmitting the n-level PSK modulated signal or the n-level QAM modulated signal;

wherein the transmission power of the n-level PSK modulated signal or the n-level QAM modulated signal is determined according to information representing the selected value of n;

said receiving method comprising:

- demodulating the n-level PSK modulated signal or the n-level QAM modulated signal to a demodulated data stream.

105. (Canceled).

106. (Currently Amended) A signal transmission method for transmitting a PSK modulated signal or QAM modulated signal, the method comprising:

- modulating a data stream to an n-level PSK modulated signal or an n-level QAM modulated signal, wherein n is an integer,

wherein the modulating includes selecting a value of n from a plurality of ~~fo~~ values of n ~~according to a transmission condition~~; and

- transmitting the n-level PSK modulated signal or the QAM modulated signal;

wherein the transmission power of the n-level PSK modulated signal or the n-level QAM modulated signal is determined according to information representing the selected value of n.

107. (Canceled).

108. (Currently Amended) A signal receiving method comprising:

- receiving a transmitted n-level PSK modulated signal or a transmitted n-level QAM modulated signal, wherein n is an integer,

wherein the value of n is selected from a plurality of values of n, and the transmission power of the transmitted n-level PSK modulated signal or the transmitted n-level QAM modulated signal

is relative to information representing the selected value of n ~~according to a transmission condition;~~
and

- demodulating the transmitted n-level PSK modulated signal or the transmitted n-level QAM
modulated signal to a data stream.

109. (Canceled).